REMARKS/ARGUMENTS

Claims 1-37 are pending in the application. Claims 1, 19, 32 and 37 are amended.

Claims 1-14, 19-27, 32-35, and 37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cline et al. (U.S. 5,313,616); claims 15, 28 and 36 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cline in view of Beizer, "Software Testing Techniques," 1986. Applicants submit that all of the pending claims are patentable over the cited references, and reconsideration and allowance of these claims are respectfully requested.

The independent claims 1, 32, and 37 include, among other limitations, "parsing a source code of the computer program to identify <u>behavior of</u> functions in the source code," and "responsive to the identified <u>behavior of</u> functions, generating stubs <u>to be called by respective functions in the source code</u> for <u>testing</u> the source code."

Independent claim 19 includes, among other limitations, "parsing the source code of the computer program to identify <u>behavior of</u> a plurality of smaller components in the source code;" "based on the identified <u>behavior of</u> plurality of smaller components, generating stubs to emulate some of the identified plurality of smaller components," and "testing the plurality of smaller components individually <u>with the generated stubs</u> <u>emulating some of the identified behavior</u>."

However, Cline does not teach or suggest "identify[ing] behavior of functions in the source code," as required by the independent claims 1, 19, 32, and 37. Moreover, Cline does not

teach or suggest "responsive to the identified behavior of functions, generating stubs to be called by respective functions in the source code for testing the source code," as required by the independent claims 1, 32, and 37. Nor does Cline teach or suggest "based on the identified behavior of plurality of smaller components, generating stubs to emulate some of the identified plurality of smaller components," and "testing the plurality of smaller components individually with the generated stubs emulating some of the identified behavior," as required by the independent claim 19.

Instead, Cline describes generating (what he calls) "stubs" for calling the code to certify "that tested and verified application programs will run on any hardware and operating systems which were designed in conformance with a set of system rules. This [Cline's] invention therefore allows application program developers to produce software which conforms to open standards, thereby greatly increasing the potential market for their application programs." Col. 2, lines 58-61.

For example, Cline emphasizes, in col. 15, lines 50-55 that "in a first step 60 the DBV inserts monitoring code into the application program's executable binary code. The application program is then exercised in a test harness in a step 62 so that the monitoring code can monitor and record system and procedure calls in a log database." Furthermore Cline describes "a system loader ld is used to relocate an object module called spy.o (which contains the dynamic verification code) to the end of the input program text in a step 74" Col. 16, lines 17-20.

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Therefore, the "stubs" of Cline are simply test routines ("monitoring code") that call the code to certify it.

In contrast, the claimed invention generates stubs responsive to the identified <u>behavior</u> of functions in the code to test the code. The generated stubs are being called by the source code to emulate other functions that are being called by a function under test, and not being tested by the present invention.

In fact, by emphasizing (in Col. 16, lines 29-34) that after total size of the resultant object module is determined, "DBV then scans the input source text for procedure calls (recognized by the bsr or bsr.n instructions) and makes a list of all of the calls by location and target in a step 82. As a call target is listed, a 'stub' for that call is also generated and the current total stub size is tallied," Cline teaches away from "identify behavior of functions in the source code," and "responsive to the identified behavior of functions, generating stubs to be called by respective functions in the source code for testing the source code," as required by the independent claims 1, 32, and 37. For the same reason Cline teaches away from "based on the identified behavior of plurality of smaller components, generating stubs to emulate some of the identified plurality of smaller components," and "testing the plurality of smaller components individually with the generated stubs emulating some of the identified behavior," as required by the independent claim 19.

As a result, neither Cline, nor Beizer, alone or in combination, teach or suggest the above-mentioned limitations,
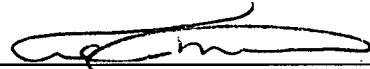
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required by independent claims 1, 19, 32 and 37. Dependent claims 2-18, 20-31 and 34-36 all depend, directly or indirectly from their respective independent claims. Therefore, these claims are also patentable over the cited references, as being dependent from allowable independent claims and for the additional limitations they include therein.

In view of the foregoing amendments and remarks, it is respectfully submitted that this application is now in condition for allowance, and accordingly, reconsideration and allowance are respectfully requested.

Respectfully submitted,

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